

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,238	08/31/2001	Shrjie Tzeng	58269.00014	1315
32294 7590 11/29/2007 SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER	
			MOORE JR, MICHAEL J	
			ART UNIT	PAPER NUMBER
			2619	•
			MAIL DATE	DELIVERY MODE
			11/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

09/943,238 Art Unit: 2619

DETAILED ACTION

Claim Objections

1. Claim **11** is objected to because of the following informalities: On line 15, an objection is made to the use of the word "designations". It is unclear whether this limitation is referring to the claimed "numbering schemes" or some other designations. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claim **11** is rejected under 35 U.S.C. 102(e) as being anticipated by Wong et al. (U.S. 6,754,216) ("Wong"). *Wong* teaches all of the limitations of the specified claim with the reasoning that follows.

Regarding claim 11, "designating a first plurality of ingress or egress ports of a first switch by a first numbering scheme" is anticipated by buffers 0-8 (ingress ports with first numbering scheme) of fabric access devices (FAD) 414, 416, and 418 of Figure 4 that are part of the switch fabric 300 (first switch) of Figure 3.

"Designating a second plurality of ingress or egress switch ports of a second switch by a second numbering scheme" is anticipated by port interface devices 0-7

09/943,238 Art Unit: 2619

(ingress ports with second numbering scheme) of port interface device (OCTOPID) groups 440, 442, 444, 446, 448, 450, and 452 of Figure 4 that are part of the Ethernet switch system 350 (second switch) of Figure 3.

"Coupling a first link port of the first plurality of ports to a second link port of the second plurality of ports" is anticipated by buffers 0-8 (first plurality of ports) of fabric access devices (FAD) 414, 416, and 418 that are coupled to port interface devices 0-7 (second plurality of ports) of port interface device (OCTOPID) groups 440, 442, 444, 446, 448, 450, and 452 via TAP multiplexers 426, 428, 430, 432, 434, and 436 as shown in Figure 4.

"Configuring the first switch to generate a first rate control message at the first switch and relay the first rate control message to a first local communications channel of the first switch" is anticipated by SWIP controller 305 of switch fabric 300 (first switch) of Figure 3 that monitors the congestion of the port interface devices and transmits a congestion rating (first rate control message) to the port interface devices as spoken of on column 16, lines 37-50.

"Configuring the first switch to perform a rate control function related to the second switch based on the first rate control message" is anticipated by SWIP controller 800 of Figure 8 containing congestion control module 840 that controls transmissions (rate control function) in light of detected congestion conditions (based on the first rate control message) as spoken of on column 15, lines 18-34.

Lastly, "wherein each of the first plurality of ports and the second plurality of ports is configured to perform switching and rate control functions based on the designations"

09/943,238 Art Unit: 2619

is anticipated by buffers 0-8 (first plurality of ports) of fabric access devices (FAD) 414,

416, 418 as well as port interface devices 0-7 (second plurality of ports) of port interface

device (OCTOPID) groups 440, 442, 444, 446, 448, 450, and 452 that are configured to

transmit and receive data (switching and rate control) controlled by SWIP controller 404

within the switch fabric of Figure 4 as spoken of on column 15, lines 18-34 as well as

column 16, lines 48-55.

Allowable Subject Matter

4. Claims 1-10 and 12-23 are allowable over the prior art of record.

5. The following is a statement of reasons for the indication of allowable subject

matter:

Regarding claims **1-10 and 12-23**, these claims are allowable for the reasons indicated in the previous Office Action.

Response to Arguments

6. Applicant's arguments filed 9/14/07 have been fully considered but they are not

persuasive.

Regarding amended claim 11, Applicant argues that the FAD buffers 414, 416,

and 418 of Wong do not equate to the "first plurality of ingress or egress ports" of this

claim. Applicant further argues that an ingress port of a switch is an incoming interface

on a switch and an egress port is an outgoing interface on a switch, while a buffer is a

temporary storage area, and follows that one skilled in the art would not equate the FAD

buffers of Wong with the first plurality of ingress or egress ports because they perform

different functions.

09/943,238 Art Unit: 2619

While it is agreed that a buffer is a temporary storage area, it is held that a buffer can be broadly interpreted to be an interface on a switch to which other devices can be connected. As shown in Figure 4 of Wong, the buffers 0-8 of each of FAD devices 414, 416, and 418, are coupled to Tap Mux devices 426-438 and communicate (interface) with these devices. These FAD devices are within a switch fabric. While a buffer itself includes a temporary storage area, the buffer must also include some type of an input (ingress) interface as well as some type of an output (egress) interface in order to be able to communicate with the components that it is coupled to. Therefore, giving a broadest reasonable interpretation of the claim language, it is held that the FAD devices of Wong function as buffers as well as an "ingress or egress port" providing connection to other devices.

Regarding claim **11**, Applicant also argues that there is no teaching or suggestion in *Wong* that the buffers 0-8 of fabric access devices (FAD) 414, 416, and 418 are configured to perform switching and rate control functions <u>based on designations</u>. However, these FAD buffers are a part of the switch fabric of Figure 4 and they are involved in the transmission and reception of data as well as congestion control information between SWIP controller 404 and port interface device (OCTOPID) groups 440, 442, 444, 446, 448, 450, and 452.

As Applicant noted, *Wong* discloses that each of the fabric access devices (FAD) 414, 416, and 418 includes a multiplexer 420, 422, 424 used to select a specific buffer that is to transmit or receive data. It is further stated on column 15, lines 18-34, how the

09/943,238 Art Unit: 2619

SWIP controller receives buffer status information from the FAD buffers and determines which FAD buffers should have their contents transmitted. It is held that this constitutes a "switching function" as data is switched through a specific buffer.

Wong also discloses on column 16, lines 48-55, how the SWIP controller transmits a congestion rating to all port interface devices such that a determination can be made whether to transmit or discard data. As shown in Figure 4, SWIP controller communicates with port interface device (OCTOPID) groups via fabric access devices (FAD) 414, 416, 418 and TAP MUX devices 426-436. Therefore, it is held that the FAD buffers perform a "rate control function" of transmitting a congestion rating (regulates network congestion and packet dropping) from SWIP controller 404 to port interface device (OCTOPID) groups 440-452.

Furthermore, it is unclear from the current claim language what the claimed "designations" are or how the "switching and rate control functions" are performed in regard to these "designations".

Therefore, it is held that *Wong* teaches the above limitations in question.

Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shi et al. (U.S. 6,977,895) is an additional reference considered pertinent to this application.
- 8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

09/943,238 Art Unit: 2619

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing F. Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

09/943,238 Art Unit: 2619 Page 8

assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J. Moore, Jr.

Examiner

Art Unit 2619

mjm HM

SUPERVISORY PATENT EXAMINER